LaTeX packages

February 25, 2022

Contents

1 Section

Dummy text

1.1 Subsection

Dummy text

2 Another Section

Dummy text

This part can be used with package ‘amsmath’

$$f(x) = x^2$$

This part can be used with package ‘graphicx‘

Figure 1: LaTeX figure

For subfigures, package ‘subcaption‘ is needed

(a) 1 (b) 2

Figure 2: Two subfigures

3 Tables

Normal table

A	B	C
L left	C center	R right
1	2	3
1.01	2.02	3.03
1.1	2.002	3.003

booktabs

A	B	C
L left	C center	R right
1	2	3

Aligned decimal

1.000	2.000	3.000
1.010	2.020	3.030
1.100	2.002	3.003

multirow table

A	B C	C R
L left	center	right
1		2

longtable

A	B	C
L left	C center	R right
1	2	3
2	2	3
3	2	3
4	2	3
5	2	3
6	2	3
7	2	3
8	2	3
9	2	3
10	2	3
11	2	3
12	2	3
13	2	3
14	2	3
15	2	3
16	2	3
17	2	3

A	B	C
L	C	R
left	center	right
18	2	3
19	2	3
20	2	3
21	2	3
22	2	3
23	2	3
24	2	3
25	2	3
26	2	3
27	2	3
28	2	3
29	2	3
30	2	3

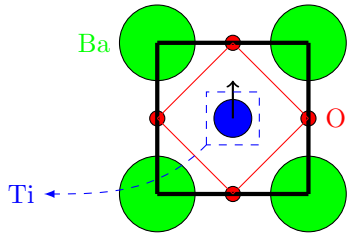
Rotated table

A	B	C
L	C	R
left	center	right
1	2	3

Autogenerated csv table

Step	*Temp.* K	u_x Å	u_y Å	u_z Å
0000020000	360.000	0.139×10^{-3}	-0.488×10^{-3}	-0.152
0000025000	360.000	-0.564×10^{-3}	0.698×10^{-3}	-0.152

4 Drawing



5 Source Code Listings

```
#!/usr/bin python
def hello_world(text=''):
    print(''Hello World {}!''.format(text))
```

```
Class Number():
    def __init__(self, n=1):
        self.number=n

    def print(self):
        print("The number is {}.".format(n))
```

These are citations[1] and Paul et al. ("Ferroelectric Phase Transitions in Ultrathin Films of $BaTiO_3$", p. 1) using biblatex.

[1] Nishimatsu et al., "Fast molecular-dynamics simulation for ferroelectric thin-film capacitors using a first-principles effective Hamiltonian", p. 2.

References

Nishimatsu et al.: Fast molecular-dynamics simulation for ferroelectric thin-film capacitors using a first-principles effective Hamiltonian PhysRevB.78.104104

Takeshi Nishimatsu et al. "Fast molecular-dynamics simulation for ferroelectric thin-film capacitors using a first-principles effective Hamiltonian". In: *Phys. Rev. B* 78 (10 2008), p. 104104. DOI: 10.1103/PhysRevB.78.104104. URL: https://link.aps.org/doi/10.1103/PhysRevB.78.104104.

Paul et al.: Ferroelectric Phase Transitions in Ultrathin Films of $BaTiO_3$ PhysRevLett.99.077601

Jaita Paul et al. "Ferroelectric Phase Transitions in Ultrathin Films of $BaTiO_3$". In: *Phys. Rev. Lett.* 99 (7 2007), p. 077601. DOI: 10.1103/PhysRevLett.99.077601. URL: https://link.aps.org/doi/10.1103/PhysRevLett.99.077601.